

FIGURE 1

DATA SET 1												DATA SET 2			
General Gene Marker Type	Examples of Gene Types	Gene Marker	Polymorphisms	Links with Cancer susceptibilities	Links with higher risks of cancer susceptibility	Homozygote or heterozygote relative to wild type	Genetic Susceptibility ranking					Foods and other materials to avoid	Dietary and lifestyle advice		
							Reduces susceptibility	Normal susceptibility	Moderate increase in susceptibility	Higher susceptibility	Very high susceptibility				
Type I	Genes that code for enzymes responsible for the detoxification of xenobiotics in Phase I metabolism	CYP													
			Cyp1A1-A (Wild type)	Colorectal, urinary bladder, breast, oral cavity, stomach, and lung cancers		Homozygote		YES				Reduce consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Consume food products, such as for example vegetables and fruit, e.g. cruciferous and allium family of vegetables.		
			Cyp1A1-C	Colorectal, urinary bladder, breast, oral cavity, stomach, and lung cancers.		Homozygote			YES		YES	Avoid consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Increase consumption of food products known to induce Phase II metabolism, e.g. cruciferous and allium family vegetables.		
						Heterozygotes						Avoid consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Increase consumption of food products known to induce Phase II metabolism, e.g. cruciferous and allium family vegetables.		
			Ile-Val polymorphism	Colorectal, urinary bladder, breast, oral cavity, stomach, and lung cancers.		Homozygote					YES	Avoid consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Increase consumption of food products known to induce Phase II metabolism, e.g. cruciferous and allium family vegetables.		
		NAT1				Heterozygotes			YES			Avoid consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Increase consumption of food products known to induce Phase II metabolism, e.g. cruciferous and allium family vegetables.		
			NAT1*4 (wild type)			Homozygote		YES				Reduce consumption of potential procarcinogens (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Consume food products, such as for example vegetables and fruit, e.g. cruciferous and allium family of vegetables.		
													Increase consumption of food products known to induce Phase II metabolism e.g. increase consumption of fruit and vegetables, particularly cruciferous vegetables such as broccoli and members of the allium family such as garlic and onion.		
			NAT1*10	Colon cancer		Homozygote					YES	Avoid consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Increase consumption of food products known to induce Phase II metabolism e.g. increase consumption of fruit and vegetables, particularly cruciferous vegetables such as broccoli and members of the allium family such as garlic and onion.		

Figure 2

